SOW/PWS

DEACTIVATION, DEMOBILIZATION AND REMOVAL (DD&R) OF THE K-5 RETENTION BASINS (K-5), COOLING TOWER AND PUMP HOUSE (H-1)

15 AUG 2005

C.1 END-STATE VISION AND RESTORATION REQUIREMENTS

C.1.1 Task Order Purpose and Overview

The purpose of this task order is to obtain turnkey services to deactivate, demolish and remove two SPRU Project structures, and perform characterization of the surrounding soil and groundwater.

The Contractor will also provide surveillance and maintenance services for SPRU office trailers, storage areas, equipment, and approximately thirty acres of land managed as soil contamination areas for the duration of this contract. The removal of the structures is to be completed within twenty-four (24) months of the award of the Task Order Contract.

C.1.2 Background

The Separations Process Research Unit, located at KAPL in Niskayuna, New York, was operated from 1950 to 1953 as a pilot plant to research the REDOX and PUREX chemical processes to extract uranium and plutonium from irradiated uranium. These operations contaminated the SPRU facilities and environmental media, resulting in the need to remediate the SPRU site. The SPRU site land areas are owned by the U.S. Department of Energy (DOE) and are currently maintained by SPRU Project contractors. The current contractor is CH2M Hill whom will be turning over responsibility of surveillance and maintenance activities to this task contractor no later than December 30, 2005. See Exhibit D, SPRU Areas Locator Photo for a depiction of the SPRU land areas, Cooling Tower and Pump House, and Structure K5 location in relationship to the main site areas.

C.1.3 End-State Vision

Task Order completion will be achieved when the following end-state vision is realized:

1. The K5 Structure is removed, wastes shipped offsite and accepted by the appropriate disposal facility, the surrounding soil and groundwater characterized, the regulator approves the RCRA Facility Assessment Sampling Visit Report, and the resulting excavation is stabilized to prevent pooling of water and erosion. In addition, the demolition report and

radiological soil and groundwater characterization report is accepted by the DCOR.

2. The H-1 Cooling Tower and Pump House is removed, wastes shipped offsite and accepted by the appropriate disposal facility, the surrounding soil and groundwater characterized, and the resulting excavation is restored to grade. In addition, the demolition report and radiological soil and groundwater characterization report is accepted by the DCOR.

3. The Surveillance & Maintenance program for the SPRU Project office trailers, storage areas, equipment, and approximately thirty acres of land areas is up to date, documented, and ready to be transferred to another contractor as the DCO may direct.

4. Permanent records, including environmental samples that should be archived, are identified and transferred into a depository where they can be readily stored and retrieved by DOE and successor contractors.

C.2 TASK DESCRIPTIONS

C.2.1.1 K5 Retention Basin DD&R and Environmental Restoration Activities

The SPRU project site has applied for a separate RCRA Corrective Actions only permit that will cover this work. The K5 Retention Basin is currently identified as (SWMU-040). The K5 structure is an in-ground, open-top concrete structure that is approximately 22 feet wide by 43 feet long and 11 feet high and has four walls with a thickness of approximately 1 foot. This basin has a divider wall that forms two 30,000 gallon holding basins. The basins have a roof structure serving as a weather cover. Radioactive contamination is present on the concrete surfaces, in piping, and in the surrounding soils. A fence 4 feet high by approximately 600 linear feet encloses the K5 area. DOE has approved the classification of this facility as a less than Category III Nuclear Facility. See Exhibit E for K5 Retention Basins Photos, Exhibit F for "Stabilization Report for Building K-5, KAPL Lower Level," and Exhibit G for Structure K5 Drawings. Also, see Exhibit H for TSM-11 "Outside Areas Historical Site Assessment".

K5 Task Objectives

The Contractor shall complete the following objectives:

- Radiological and chemical characterization for personnel health and safety;
- Prepare the required RCRA work plans, radiological characterization plans, regulatory required notifications and assessments, and demolition work plan to support this task.

- Demolish and remove the K5 structure, remaining underground piping, utilities, and incidental soil contaminated with demolition debris by September 30, 2006.
- Remove and dispose of the K5 perimeter fence including fence post foundations.
- Characterize, package, ship and obtain acceptance by an offsite disposal facility for all waste generated.
- Sample the underlying soil and groundwater to assess releases of chemicals and radioactivity from the K5 structure and piping.
- Re-grade and stabilize the K5 area to prevent pooling of water and erosion. When available, utilize soil from the KAPL clean soil management area as fill material.
- Prepare and issue the RCRA assessment report, radiological characterization report, demolition completion report to document completion of this task.

C.2.1.2 H-1 Cooling Tower and Pump House DD&R

The Cooling Tower and Pump House (H-1) is located in the northwest corner of the Knolls Site upper level. H-1 was constructed in 1950 to support the operation of SPRU. After SPRU shutdown, H-1 continued to support KAPL activities until 1992. H-1 consists of a two stack, forced circulation cooling tower and attached pump house that contains a pumping system to circulate the cooled water throughout the Site. See Exhibit I Cooling Tower Photos, and Exhibit J Cooling Tower Drawings.

The cooling tower is constructed of redwood with PVC corrugated siding. It is approximately 26 feet wide, 48 feet long, and extends 31 feet above grade. The concrete basin and footers extend 6 feet below grade.

The pump house is constructed of concrete and asbestos corrugated siding. The structure is approximately 22 feet wide, 27 feet long and extends 14 feet above grade. The sump and footers are concrete and extend approximately 10 feet below grade. Interior components include pumps, piping, steam heaters, insulating materials, and associated electrical components.

Chemicals used to treat cooling water included chromates, sulfuric acid, sodium hypochlorite, chlorine, and PC 122 phosphate. Although there is no known history of radioactive contamination of the cooling tower the contractor is still responsible to complete chemical and radiological characterization for personnel safety and waste characterization.

Outside the cooling tower there is a potential for very low concentrations of radioactive contamination. The contractor will be provided with the latest information available on radioactive contamination in soil. The highest concentration found to date near the cooling tower is 3 pci/gram of Cesium 137. The contractor should also note that near the cooling tower is Building H2, and a

below grade tank enclosure. These facilities are nuclear facilities. The contractor is not permitted to perform work within these nuclear facilities or operate equipment over the tank enclosure except that entry into Building H2 may be necessary for the purpose of performing inspections to trace utility lines that pass through Building H2 and subsequently connect to the cooling tower. In the event isolation of a utility can only be accomplished from within the nuclear facility, or would otherwise require the disconnection to be done on a utility that could impact the nuclear facility, the contractor shall identify the need for the disconnection in writing to the DCOR, and the DCOR will arrange for the disconnection service to be provided by Knolls Site personnel. At least eight weeks lead time shall be provided by the contractor for the site to perform this service. The DCOR will provide to the contractor drawings indicating the current configuration of the utility systems within 30 days of award of contract. All drawings will be subject to contractor verification as needed to support H-1 removal.

H-1 Task Objectives

The Contractor shall complete the following objectives:

- Radiological and chemical characterization for personnel health and safety;
- Prepare the necessary radiological and chemical characterization plans, regulatory required notifications and assessments, and demolition work plan to support this task.
- Asbestos removal and disposal;
- Cut and cap all active and inactive piping systems;
- Disconnect all electric power and communication lines;
- Demolish, remove, and dispose of the cooling tower and pump house structure, and incidental soil surrounding H-1 that may contain chemical or radioactive contamination as a result of demolition activities by December 30, 2005;
- Characterize the remaining excavation and immediate work areas for potential chemical contaminants from cooling tower operations and radioactivity, and provide a report of this characterization to the DCOR.
- Characterize and package all waste, and dispose of it at an appropriate facility;
- Obtain DCOR concurrence to restore the excavation with clean soil to grade, reseed, and establish and maintain erosion controls until the ground cover has been re-established.
- Prepare and issue a final radiological and chemical characterization report of the excavated and disturbed area, and demolition completion report to document completion of this task.

C.2.1.3 SPRU Project Surveillance and Maintenance Activities

Surveillance and Maintenance Task Objectives

The SPRU Project requires maintenance of its facilities, equipment, and land areas. This includes a temporary modular office complex, temporary trailers, storage structures, and equipment to support administrative and field activities to be carried out during activities discussed in this scope of work, and other contracts that the DOE may award. In addition there are approximately thirty acres of land that are managed as "Soil Contamination Areas" by the SPRU Project.

The Contractor shall complete the following objectives:

- Provide services for all SPRU Project areas to
    - Maintain a safe work environment
    - Provide for repair, periodic maintenance, and janitorial services for all project trailers
    - Grass cutting and snow removal
    - Overall responsibility for the Project Security Plan for the SPRU areas.
    - Maintain the soil contamination areas in accordance with the Radiological Protection Plan and applicable DOE Orders, Guides, and Standards.
    - Provide dosimetry services as needed for accomplishment of this task order, and for other visitors and contractors that DOE may bring on site during the course this contract is in effect.
- Maintain custody of environmental samples and provide for their storage.
- Add, remove, or modify facilities to support the SPRU Project effort for tasks discussed in this contract.
- Accept ES&H responsibility for SPRU Project land areas from the Knolls Site.
- Manage SPRU Project facility, equipment, and land areas and prepare a written Surveillance and Maintenance Program to maintain them.
- Reconfigure SPRU Project facilities to support ongoing project work. This shall include installation and removal of temporary structures, reconfiguring of existing structures, modification of fencing, asphalt repair, electrical modifications and other modifications inherent to project operations.

C.2.2 Requirements Common to All Tasks

1. Investigate the task sufficiently to plan for and mitigate health and safety and environmental impacts consistent with the approved ISMS plan. See the Deliverables list, Attachment C, for quick reference to appropriate statement of work sections.

2. Prepare all required plans associated with this subtask including the Radiological Sampling and Analysis Plans, RCRA Facility Assessment Work Plan for the K5 Basin, NESHAPS notification(s), Health & Safety Plan, Hazard Analysis, Environmental Protection Plan, Emergency Preparedness Plan, Project Security Plan, Radiological Protection Plan, DOELAP certified dosimetry program, Waste Management Plan, Demolition Plan, Characterization Reports, Readiness Verification Report(s), and ES&H Responsibility Agreements. See the Deliverables list, Attachment C, for quick reference to appropriate statement of work sections.

3. Decontaminate work areas sufficient for safe and efficient work execution and to prevent release of radionuclides in excess of the limits of the Radiological Protection Plan and DOE Order 5400.5.

4. Removal of incidental soil is anticipated. Radiological Areas as defined in 10CFR835 may be encountered.

   Note: Incidental soil is soil that has been contaminated with demolition debris and dust. It is assumed for the purpose of estimating soil removal costs for this subtask that the volume of soil that may become contaminated with demolition debris and dust is contained within three feet of the perimeter walls of structures, one foot below the foundation slab and footers, one foot of the surface where ever demolition materials are crushed and loaded into containers, and within a foot radius of piping to be removed.

5. Sample the underlying soil, groundwater, and construction work area for chemicals per approved New York State Department of Environmental Conservation (NYSDEC) RCRA work plans, sampling protocols, and using approved laboratories for sample analysis. A RCRA work plan is not required for the cooling tower removal, however, sampling protocols shall be consistent with NYSDEC guidelines. Prepare the required assessment reports. Contractors are to follow Model Statement of Work for Analytical Laboratories as a guide; a copy will be provided by the DCOR.

6. Sample the underlying soil, groundwater, and construction work area for radioactive constituents. The characterization and sampling protocols shall follow the Multi-Agency Radiation Survey and Site Investigation Manual and RCRA requirements. The contractor's characterization report will compare the radiological sample analyses results to Derived Concentration Guides for subsistence farmer, residential-suburban, and industrial end states. The concentrations corresponding to each end state will be provided by the DCOR. Contractors are to follow Model Statement of Work for Analytical Laboratories as a guide; a copy will be provided by the DCOR.

7. Existing sampling wells near work sites shall be protected.

8. Re-grade the site upon completion of demolition and removal of structures to prevent pooling of water and to minimize erosion. Each work site shall be restored with at least one foot (1 ft) of clean fill at the surface, reseeded, and have an erosion control barrier installed. Specifications for compaction and backfill, reseeding, and erosion control barriers will be provided to the Contractor by the DCOR. The excavation area may be held open as an excavation until a decision is made by the DCOR on whether additional soil removal is required and the necessary approvals obtained. If the decision can not be made within the twenty-four month period of this task, then the DCOR will inform the contractor to proceed with restoration meeting the objective of above and the added constraint of minimizing movement of contaminated soil. The contractor is responsible to schedule the milestone date of when DCO must provide direction to remove additional soil, or otherwise concur with site restoration.

9. The tasks under this SOW are to be performed pursuant to all applicable U.S. Department of Energy Orders, Directives and Secretary of Energy Notices (SENs) and all applicable Federal, State and local laws, regulations, and permits obtained to execute this work.

10. If the Contractor performs work contrary to applicable laws, statutes, ordinances, building codes, rules and regulations then the Contractor shall assume appropriate responsibility for correcting such work and shall bear the costs attributable to correction and any fines charged. The Contractor shall hold the Department of Energy and its field offices harmless with respect to any recourse.

C.2.3 Waste Management

The Contractor shall be responsible for managing, packaging, handling and transporting all waste generated as a result of building demolition activities and paying the disposal fees. The Contractor shall institute controls to confirm the traceability of all waste packages transferred and disposed off site. Documentation to be provided to the DCOR shall include, at a minimum, the origin of the waste, content of the waste package, results of characterization and sampling, and a copy of the waste manifest showing the signatures of the generator/shipper, transporter and disposal facility accepting the waste.

The Contractor shall implement a waste minimization and pollution prevention program consistent with applicable Executive Orders and DOE Directives. The program shall be documented in the Waste Management Plan, which includes transportation, planning and a central listing of all radiological and hazardous waste materials projected to be generated and their proposed disposition path. The Contractor shall note that no scrap metal taken from the cooling tower, K5, or any soil contamination or other radiological controlled area may be recycled as

non-radioactive scrap metal. This shall be noted in the Contractor's Waste Management Plan.

The Contractor shall utilize the USEPA Generator Identification Number for the SPRU Project identifying DOE as the owner of the waste for any document where such a number is required. Where the signature of the generator or shipper is required certifying that the waste has been properly characterized or packaged, the contractor is to ensure a properly trained and appointed person signs on behalf of the DOE. A copy of the contractor appointing letter and qualifications of the individual will be provided to the DCOR for information.

The Contractor shall be responsible for the disposal of waste off-site, at facilities licensed/permitted to manage the waste and pay all transportation and disposal related fees. The Contractor shall utilize any existing Basic Ordering Agreement (BOA) between the Federal Government and waste disposal facilities when disposing of waste unless the Contractor can obtain more favorable cost arrangements. Any such new subcontract shall be subject to review and approval by the DCO and/or DCOR and shall not compromise the integrity of existing federal or state environmental and health regulatory requirements.

C.2.4 Physical Demolition

The Contractor shall demolish excess facilities identified in this statement of work in accordance with best industry practices. Demolition includes removal of all above ground structures, basements, concrete slabs, footings and all utility systems and contaminated soils defined within each subtask. Utilities servicing the facility to be demolished shall be inactive per the instructions of each subtask, or if not explicitly identified in the subtask, they shall be deactivated to the nearest remaining utility pole, adjacent building, utility manhole, or nearest valve junction using standard industry practices. These utility deactivations and tie outs shall be discussed and shown in the contractor's demolition plans, and marked on existing utility drawings. On completion of the task, drawings shall be annotated to indicate the disconnections performed and forwarded to the DCOR.

The Contractor shall coordinate as necessary with other onsite or co-located Contractors to ensure that demolition actions do not result in disruption of utility services or program activities of site facilities.

The Contractor shall effect the disposition of demolition materials in accordance with Section C.2.3, Waste Management.

C.2.5 Demolition End-State

Deleted.

C.2.6 Regulatory Contacts

All regulatory contacts determined necessary for this work activity shall be made through the DCOR at the DOE SPRU Field Office. All submittals to regulatory officials shall be prepared by the Contractor and submitted to the DCOR at the DOE SPRU Field Office for review, approval and forwarding to the appropriate regulator. The DOE will be the primary point of contact with the regulators and the contractor will prepare all necessary submittals and presentation materials, provide technical expertise, and prepare meeting minutes for each regulatory interaction.

C.2.7 Meetings

The contractor shall discuss progress to schedule bi-weekly prior to mobilization on site. It is intended that these discussions last no more than one-half hour. Once mobilized on site the contractor shall meet with the DCOR twice per week to inform the DCOR of planned work activities and potential issues that may impact progress to schedule milestones, and interface activities needed with the Knolls Site, or regulators. The contractor should also meet with Knolls Site key individuals at least twice prior to mobilization to discuss planned work and identify any interface issues that may arise during the course of work activities. The frequency should be adjusted to a meeting of approximately one-half hour duration each week when the contractor is mobilized to perform demolition and characterization activities.

C.3 OTHER REQUIREMENTS

C.3.1 Project Control Systems and Reporting Requirements

This Task Order Contract is implementing the DOE Manual 413.3-1 Project Management for the Acquisition of Capital Assets. The Contractor shall prepare the following documents consistent with this manual utilizing a graded approach for the tasks contained within this statement of work and submit them to the DCOR **within sixty (60) calendar days of contract award** for review and approval:

Cost Plan The Cost Plan shall include a detailed cost breakdown that identifies the costs by cost element (e.g. labor, materials, equipment, travel, other direct costs, etc.) and which shall be stated at the Work Breakdown Structure (WBS) work package level. The Cost Plan shall correlate to the information provided in the Contractor's task proposal except that the schedule shall depict costs on a monthly basis for the duration of the project. The WBS is defined for the SPRU project through the fourth level and will be provided by the DOE SPRU Field Office. The Contractor is to define the levels below the fourth level consistent with the

Environmental Cost Element Structure (ECES). The contractor will provide a copy of the complete WBS accounts (WBS number, name, and definitions) that will be utilized for this task proposal for review and comment as part of the task proposal, and when changes are deemed necessary.

Baseline (Schedule, Cost)

The Contractor shall provide a comprehensive, resource loaded schedule baseline. The schedule shall be to the work package level and must include milestones, identification of the critical path, float, expected GFSI (Government Furnished Services and Items), and work-around plans to mitigate the impact of activities or assumptions considered to be a significant risk to project cost or on-time completion. (For the purpose of this task proposal, significant will be considered to be the potential to affect a subtask cost greater than ten percent, or greater than one months delay on the critical path to completion of a subtask.) The schedule shall also show the costs using the same elements as an invoice but summarized on a monthly basis, and provide overhead rates and escalation information in standard industry format.

Metrics

The Contractor shall provide a month-by-month breakdown of key project deliverables, milestones, and project accomplishments over the life of the project. These may include submittals, government approvals, facility demolition completion, waste containers shipped, volume of waste disposed of, etc. The contractor is also expected to use the earned value system of reporting progress. Budgeted Cost of Work Scheduled (BCWS), Budgeted Cost of Work Performed (BCWP), and Actual Cost of Work Performed (ACWP), Cost Variance (CV) and Schedule Variance (SV) are expected to be reported for each WBS element reported in the invoice and monthly project report. Earned value statistics of Schedule Performance Index and Cost Performance Index shall be reported at the subtask level and over all tasks covered by this task proposal. The earned values statistics shall also be shown on a monthly chart to show trends. The contractor may recommend, subject to COR approval, simplified means of establishing BCWS and BCWP. For example a draft RCRA work plan submittal to the DCOR may count for seventy percent of the proposed budget, and the final work plan incorporating comments may be count for crediting thirty percent of the budget.

Risk Management Plan

The Risk Management Plan (RMP) shall include the risk management philosophy, approach, objectives and processes and should address the management of programmatic risks and uncertainties.

Contingency And Risk Analysis The Contingency and Risk Analysis shall include an estimate of all traditional contingency and an analysis of specific risk factors directly related to the project.

Baseline Work Plan This Work Plan is a narrative description of the work in this RTP by Subtask and shall include: WBS title, WBS number, included work elements, planned start and completion, life-cycle budget, life-cycle FTEs, work scope description, specific work element descriptions, metrics table (e.g. projected waste volumes, numbers of shipments, cubic meters characterized, etc.), major milestones, WBS-specific assumptions, WBS-specific risks, references, schedule, and basis of estimates.

The contractors' deliverable on this section should reflect the negotiated costs, and will form the basis of measuring and reporting progress monthly.

Monthly Reports Monthly reports will be prepared by the contractor and submitted by the tenth calendar day of each month for the preceding month's efforts. The monthly report shall contain a brief discussion of the months significant accomplishments, progress to milestones, and costs tied to the work breakdown structure, variance analysis, earned value statistics, and an estimated cost at completion. The report should contain statistics for the current month, fiscal year to date, and cumulative project to date. Figures trending earned value statistics shall also be provided. This report may be submitted separately or integrated into the monthly invoice (preferred).

C.3.2 Task Order Oversight

The Contractor shall expect routine surveillance and observation of their work by DOE personnel and shall correct violations of laws, regulations, DOE Orders, Standards or site mandated rules, upon discovery or when brought to its attention by the DCO or DCOR, within one working day. The Contractor shall correct all other deficiencies within five working days. Suggestions for the improvement of contractually mandated work shall be enacted upon mutual agreement between the Contractor and the DCO or DCOR. The Contractor shall provide logistical support to facilitate conducting oversight activities on an as-needed basis, at the discretion of the DCOR or his assign.

The Contractor shall respond to DOE oversight and to concerns, findings and observations as identified by the DCO or DCOR during the conduct of these oversight activities. The seven fundamental areas of oversight that may be conducted during the course of the execution of this task order are as follows:

(a) **Project Management Oversight:** This includes daily field inspections and the weekly and monthly assessment of project status, which will be

used to determine and validate project performance and invoices submitted by the contractor.

(b) **Contract Management Oversight:** Administration and monitoring of the task order will be performed by the Task Manager, DCOR or their designee. All information and documentation relinquished by the Contractor will be retained by the DCOR for the Task Order File.

(c) **Financial Management Oversight:** The Contractor shall provide budgetary data as required to DOE to facilitate its oversight and auditing functions. DOE will review all budgetary data submitted by the Contractor.

(d) **Integrated Safety Management/Operations Oversight:** The Contractor shall provide documentation and participate in meetings to allow DOE to monitor the Contractor's compliance with DOE Order 450.4, "Safety Management System Policy."

(e) **Daily Oversight:** DOE may utilize Facility Representatives, Project Managers and Subject Matter Experts in addition to the DCOR, to conduct daily oversight for the duration of this task order. The purpose of this oversight will be to assess compliance with the terms and conditions of the task order contract. In addition to this oversight, the Contractor shall support:

(1) Senior management walk-through, conducted in scheduled areas of the plant or locations where significant work is ongoing;
(2) Specific tours of buildings just prior to demolition, or release sites that have been deemed as response actions;
(3) Periodic walk-through by the regulators, Defense Nuclear Facilities Safety Board (DNFSB), or DOE Headquarters personnel;
(4) Employee concerns elevated to DOE for evaluation;

(f) **ES&H and Maintenance Responsibilities:** Transfer of ES&H responsibilities from Knolls Site to DOE shall occur and be documented in writing. The purpose of the transfer is to eliminate duplication of oversight and maintenance responsibilities between the Knolls Site and DOE SPRU project. Examples of the ES&H Responsibility Transfer forms are provided in Exhibit M. The contractor is responsible for preparing these forms for government review and signature.

(g) **Assessments:** DOE or other regulatory agencies may conduct assessments of the Contractor's performance. Advance notice of these performance assessments will be given to the Contractor fourteen (14) calendar days in advance of the assessment when possible. DOE will eliminate, as allowed by regulations, non-safety related surveillances and assessments when the Contractor demonstrates an effective self-assessment program that includes self-identification, setting of corrective actions and effective corrective actions to prevent recurrence.

(h) **ISMS Verification:** The Contractor shall conduct a Readiness Verification (RV) and prepare a Readiness Verification Report before deactivation, decontamination or demolition work activities begin and to

demonstrate that the ISMS systems are in place. The RV shall include, but is not limited to, security clearances, staffing, equipment, regulatory approvals, emergency response capability and arrangements where coordination is needed with the KAPL site, and the status of supporting ES&H requirements including site-specific training and radiological protection. The contractor will demonstrate by documentation, discussion, and if necessary by demonstration of field activities and drills that the principles of ISMS have been implemented at the project site. The SPRU field office will be allowed 10 work days to assess and verify the acceptability of the Readiness Verifications and provide either written authorization to proceed with work or a list of activities requiring additional attention prior to proceeding within five work days of the completion of the review. To complete the verification; joint Contractor Management and DOE surveillance of infield work may be done to verify ISMS implementation.

C.3.3 Government Furnished Services/Items (GFSI)

(a) DOE and the Contractor recognize that implementation of the SOW under this Task Order in an optimized fashion is dependent upon other activities, including the GFSI identified below.

(b) Within thirty (30) calendar days after the award of this Task Order Contract the Contractor shall provide the DCO a projection of its GFSI required, based on a list of available equipment DOE has available for the duration of this task in the format of Attachment K. The Contractor shall also provide updates to this projection as it becomes aware of the need, to the DCO. Amendments to the projection, if any, shall be provided to the DCO immediately.

(c) The DCOR will review each Contractor submittal of GFSI needs and, within five (5) business days, will notify the Contractor whether it will provide the requested GFSI. If DOE will not provide the GFSI as requested by the Contractor, the DCOR will identify when it can provide the requested GFSI within five (5) business days of the request. If DOE cannot provide the request for GFSI within the time periods listed in Attachment K, the Contractor may be entitled to pursue remedies in the manner and subject to the limitations set out in DEAR Clauses 952.245-5 "Government Property (Cost-Reimbursement, Time-and-Material, or Labor-Hour Contracts)."

(d) All equipment, supplies and other materials needed to perform this work and not included as Government furnished equipment shall be supplied by the Contractor.

(e) DOE will make its best effort to complete the DOE services as specified in this contract and to review and approve documents as specified below. If DOE does not complete specific services as specified in the contract, the Contractor may submit for negotiation a request for equitable adjustment.

(f) Management Products and Controls Deliverables: DOE will approve or disapprove the Contractor's deliverables specified in the Deliverables List within 30 business days unless a different time period is specified in the

contract, or agreed to by the DCOR and contractor Project Manager in writing.

(g) Services/Items that will be provided to the Contractor are listed in Attachment K. For those items that are equipment, the contractor will be responsible to inspect, repair and maintain the equipment for use during the contract. For items which have no anticipated use, the contractor will properly store and protect the items as part of the surveillance and maintenance services identified in this contract. Consumable supplies listed in Attachment K may be used for purposes of work under this contract. The government does not make any warranty of condition of the consumable supplies, and will not replace items used, nor is the contractor expected to re-supply these items except as needed for the contract related work.

(h) The Knolls Atomic Power Laboratory will supply electricity, water, and sewer as available on site. The Contractor is responsible to extend the utility to the place of usage and coordinate the utility connection with KAPL.

C.3.4 Interface Requirements

The contractor shall submit to the DCO an Interface Plan that describes how it will address interactions with other on-site and off-site organizations and stakeholders such that, once the task order award is made, work will not be impeded. The following interfaces shall be addressed:

- DOE;
- EPA;
- New York State Department of Environmental Conservation;
- State and local agencies and/or stakeholders;
- Knolls Site contractor that provides limited infrastructure/utilities and basic services (KAPL, Inc.);
- Other existing ID/IQ or Prime Contractors;
- General work area access controls to work and support areas;
- Savannah River Site for security clearances;
- Knolls Site badging once security clearances are obtained.
- Safeguards and Security Interfaces
- Other impacted organizations
- Authorized waste disposal facilities

C.3.5 Quality Assurance Program

The Contractor shall submit to DOE for approval a project quality assurance program (QAP) that satisfies the requirements of 10 CFR 830.120 and DOE Order 414.1B. Once the contractor has responded to DCOR comments and submitted a corrected QAP, the DCOR shall obtain DOE approval of the QAP on behalf of the contractor. The contractor shall allow the DCOR an additional sixty (60) calendar days to obtain this approval. QAP approval is required prior to performing sampling, demolition, or surveillance and maintenance activities.

C.3.6 Integrated Safety Management System (ISMS) and Environmental Safety and Health (ES&H) Program

ISMS

The Contractor shall submit to DOE for approval an ISMS plan and ES&H program including the documents described below.

The Contractor shall maintain a single ISMS program to accomplish all work as required by DEAR 970.5223-1, and shall be solely responsible for subcontractor training and adherence to the established safety program.

The Contractor's ISMS shall ensure safety considerations are integrated throughout the entire work planning and execution process and shall extend through the execution of individual work packages where job site safety is ensured for each worker until all work is completed and the contractor demobilized. The contractor shall prepare a Health & Safety Plan (HASP) and associated job hazard analysis to support all tasks. The HASP shall be prepared in the form and format as specified in DOE orders and standards. Specifically, DOE STD 5503 EM Health and Safety Plan Guidelines shall be followed. The HASP shall be submitted to the DCOR for approval. All corporate standard operation procedures and those developed for this task order shall be submitted along with the HASP for information and shall be considered as part of the ISMS system. If not already included in the HASP, the contractor shall also provide the DCOR a matrix of job positions, the training and experience required for each job position, and continuing training to be given to employees.

The contractor shall conduct field drills to demonstrate competency in managing emergency situations. At least two drills will be conducted jointly with Knolls site emergency services personnel during the course of this workscope. The joint drills should be used to demonstrate the capability to assist and transport a radiologically contaminated injured person from the job site, to offsite (i.e. en route to the hospital.) One field drill shall be to demonstrate assistance to an incapacitated worker in the K5 structure, and another could be to demonstrate the capability to assist an incapacitated worker in a manlift. At least one field drill with Knolls Site emergency services personnel shall be done preceding the start of K5 Retention Basins work, and another preceding H-1 work. The contractor shall propose additional local drills not involving Knolls Site personnel as part of their ISMS program to maintain the awareness and proficiency of personnel.

The ISMS program may be subject to a verification review by a DOE chartered ISMS Verification Team, at any time during the execution of this task order. If such a review is planned the DCOR will provide the contractor at least ten work days advance notice.

Emergency Response

The Contractor shall establish site procedures to ensure that they have in-place, adequate emergency response capabilities to respond to fire/explosion, medical,

radiological and environmental emergencies. The Contractor is expected to provide first responder capability. KAPL will provide support for larger spills, fires, and emergency medical transport. The Contractor shall prepare an emergency plan outlining its capabilities, equipment, arrangements, agreements and any emergency procedures and protocols. The emergency plan shall be submitted to the DCOR prior to initiating work on site. The contractor will allow 30 work days for DCOR comments/approval and shall have the plan approved before the commencement of sampling, demolition, or surveillance and maintenance services.

ES&H

The Contractor shall provide throughout the life of the task order all required life safety, occupational medicine, fire protection, operational and emergency response, and other institutional safety programs. The Contractor shall maintain an ES&H program to ensure the protection of the workers, the public and the environment. The Contractor's ES&H program shall be operated as an integral, visible, part of how the Contractor conducts business.

The Contractor shall provide site-specific ES&H training for up to ten DOE SNR/KAPL and regulatory personnel in addition to Contractor/Sub-Contractor personnel per applicable laws, regulations and DOE orders. A policy for safety training of infrequent site visitors shall be prepared by the Contractor and submitted to the DCOR for review and concurrence.

The Contractor shall provide the necessary personnel protective equipment (PPE), safety briefings and Contractor escorts when needed for all visitors (both Government and non-Government) to contractor controlled work areas. The Contractor shall be responsible for the subsequent decontamination and disposal of such PPE.

Environmental Protection

The contractor shall integrate environmental protection into the ISMS Plan in accordance with DOE Order 450.1 and prepare and submit an Environmental Protection Plan (EPP) for approval. The EPP may require the preparation and submittal of a Spill Counter Measures Control Plan and a MS-4 storm water discharge permit to the NYSDEC depending on the operations planned in accordance with this task order.

Certification of Laboratories

For radiological or chemical analyses, laboratories, including those used or provided by the Contractor, shall develop quality assurance procedures for sample analysis. The Contractor shall use laboratories that participate in and have been audited by the DOE Consolidated Audit Program. The Contractor shall provide the name of the laboratory or laboratories to be used to the DCOR. These requirements shall be met prior to the Contractor's mobilization of an onsite laboratory, prior to use of an offsite laboratory. For sample collecting and analysis performed under the DOE RCRA permit, the Contractors must also review the laboratory's credentials and submit this information to the regulator

prior to performing sampling related the requirements of a RCRA characterization workplan.

C.3.7 Nuclear and Radiation Safety Program

The Contractor shall comply with and submit for DOE approval, within thirty (30) calendar days of the task order award date, a plan to comply with the programs required by Title 10, Code of Federal Regulations, Parts 830 and 835.

The Contractor shall establish and maintain a Radiological Protection Program (RPP) to ensure the proper protection of workers, visitors and the public from excessive radiation exposure. The RPP shall be submitted to the DCOR for review and approval prior to mobilization onsite. The Contractor shall arrange medical screening of the DOE field office personnel if required to enter the work areas, shall determine the need for a personnel radiation monitoring program, and shall recommend and justify the need to the DCOR. All internal and external dosimetry programs required shall be in accordance with the certification requirements of the DOE Laboratory Accreditation Program (DOELAP) as specified in 10-CFR-835. Dosimetry services (external and internal) shall be extended to the DOE office personnel and to visitors. The contractor should note that the RPP may take as long as six months to obtain approval once the DCOR has accepted the RPP and transmitted it to the approving authority. The contractor should also note that once the DCOR is satisfied with the contractor technical basis for dosimetry programs, and completeness of the application, the DCOR will submit the application to DOE-EH for approval. The contractor is responsible for responding to DOE-EH questions, arranging for DOE-EH reviews of the contractor programs and meetings to obtain accreditation of the contractor program. This process can take as much as six months to complete.

The Contractor shall establish a written program in support of the Price Anderson Amendments Act (PAAA) program. This includes, but is not limited to, site requirements for deficiency evaluation, tracking, trending, and if necessary, reporting of nuclear safety noncompliances. It should also establish the roles and responsibilities for a Site PAAA Coordinator and the role of Site management.

C.3.8 Contractor Demobilization

The contractor shall prepare and submit a Demobilization Plan to the DCOR for review and comment eighteen (18) months after award of this task proposal. The contractor should assume that DOE's intention will be to transfer surveillance and maintenance responsibilities to a successor contractor. This plan is intended to help create a smooth transition. The plan shall address the removal of excess equipment, office equipment, transfer of records to DOE, office trailer removals, surveillance and maintenance program changes, restoration of work areas, and staffing levels.